

AM/FM STEREO TUNER

# KT-76/KT-550L INSTRUCTION MANUAL

KENWOOD

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88/8

## For your records

Record the serial number, found on the back of the unit, in the spaces designated on the warranty card, and in the space provided below. Refer to the model and serial numbers whenever you call upon your dealer for information or service on this product.

Model \_\_\_\_\_ Serial Number \_\_\_\_\_

## Unpacking

Unpack the unit carefully and make sure that all accessories and cables are put aside so they will not be lost. Examine the unit for any possibility of shipping damage. If your unit is damaged or fails to operate, notify your dealer immediately. If your unit was shipped to you directly, notify the shipping company without delay. Only the consignee (the person or company receiving the unit) can file a claim against the carrier for shipping damage. We recommend that you retain the original carton and packing materials for use should you transport or ship the unit in the future.

## Note to CATV system installer:

This reminder is provided to call the CATV system installer's attention to Article 820 - 22 of the NEC that provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close to the point of cable entry as practical.

## WARNING:

TO PREVENT FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

### Safety precaution for AC plug (For U.S.A. and Canada)

**CAUTION:** TO PREVENT ELECTRIC SHOCK DO NOT USE THIS (POLARIZED) PLUG WITH AN EXTENSION CORD, RECEPTACLE OR OTHER OUTLET UNLESS THE BLADES CAN BE FULLY INSERTED TO PREVENT BLADE EXPOSURE.

## Rear panel safety precautions

<b>CAUTION</b> RISK OF ELECTRIC SHOCK DO NOT OPEN	CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.
	The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure; that may be of sufficient magnitude to constitute a risk of electric shock to persons.
	The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

# Before applying power

## Important!

### U.S.A., Canada, Europe and U.K.

Units shipped to the U.S.A. and Canada are designed for operation on 120 volts AC only. Units shipped to Europe are designed for operation on 220 volts AC only. Units shipped to U.K. are designed for operation on 240 volts AC only. These units are not equipped with an AC voltage selector switch and the discussion of such a switch that follows should be disregarded.

### All other countries

Units shipped to countries other than above countries are equipped with an AC voltage selector switch on the rear panel. Refer to the following paragraph for the proper setting of this switch.

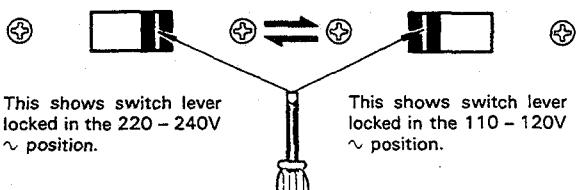
## AC voltage selection

This unit operates on 110 – 120 volts or 220 – 240 volts AC. The AC voltage selector switch on the rear panel is set to the voltage that prevails in the area to which the unit is shipped. Before connecting the power cord to your AC outlet, make sure that the setting position of this switch matches your line voltage. If not, it must be set to your voltage in accordance with the following direction.

### Note:

Our warranty does not cover damage caused by excessive line voltage due to improper setting of the AC voltage selector switch.

110 – 120V ~ □ □ 220 – 240V ~ 110 – 120V ~ □ □ 220 – 240V ~



Move switch lever to match your line voltage with a small screwdriver or other pointed tool.

## AC VOLTAGE SELECTOR SWITCH

## For United Kingdom

The mains plug must be removed from the wall socket prior to any internal examination.

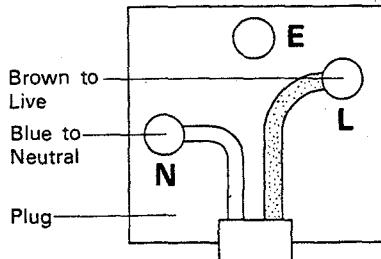
## Important

The wires in this mains lead are coloured in accordance with the following code:

Blue..... Neutral  
Brown ..... Live

The wires in this mains lead must be connected to the terminals in the plug as follows:

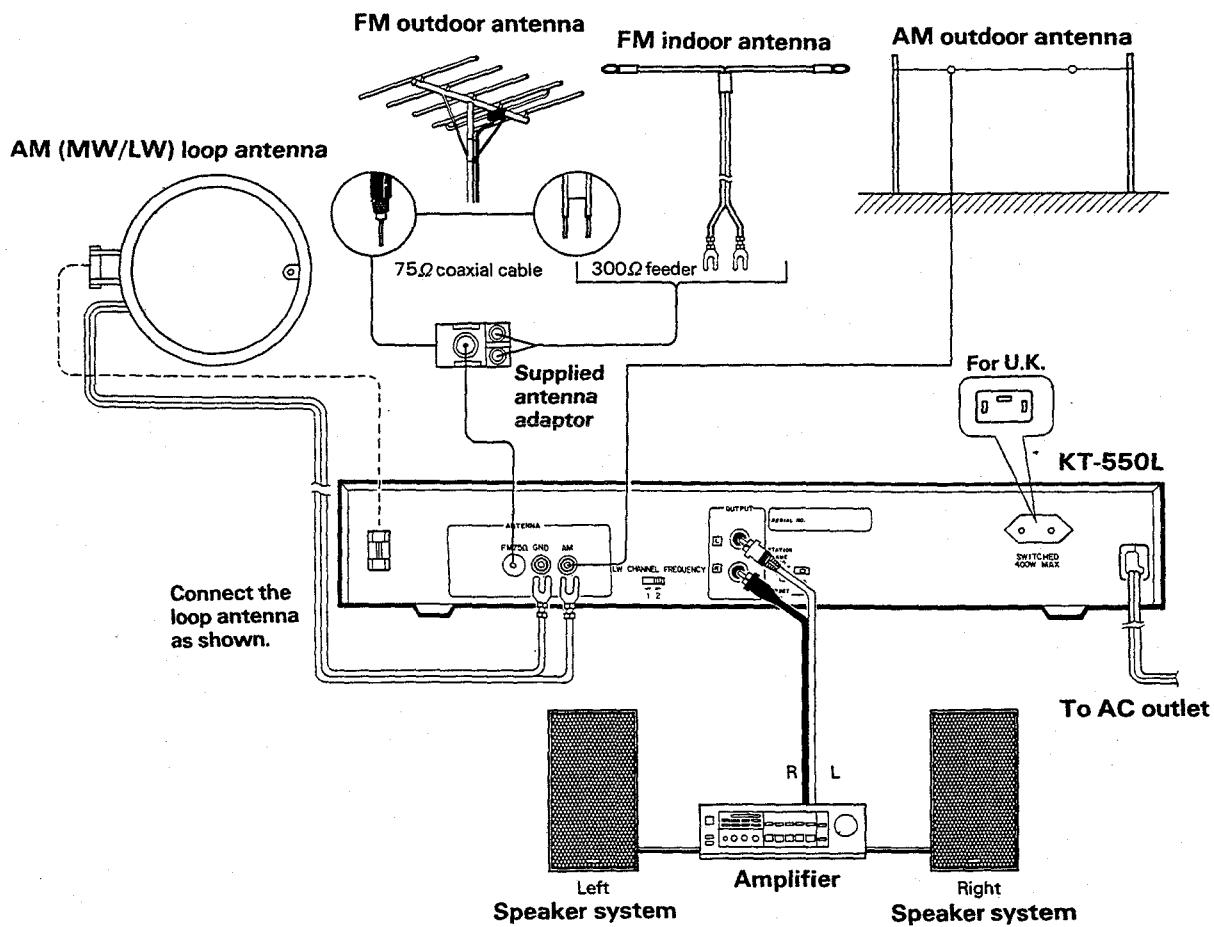
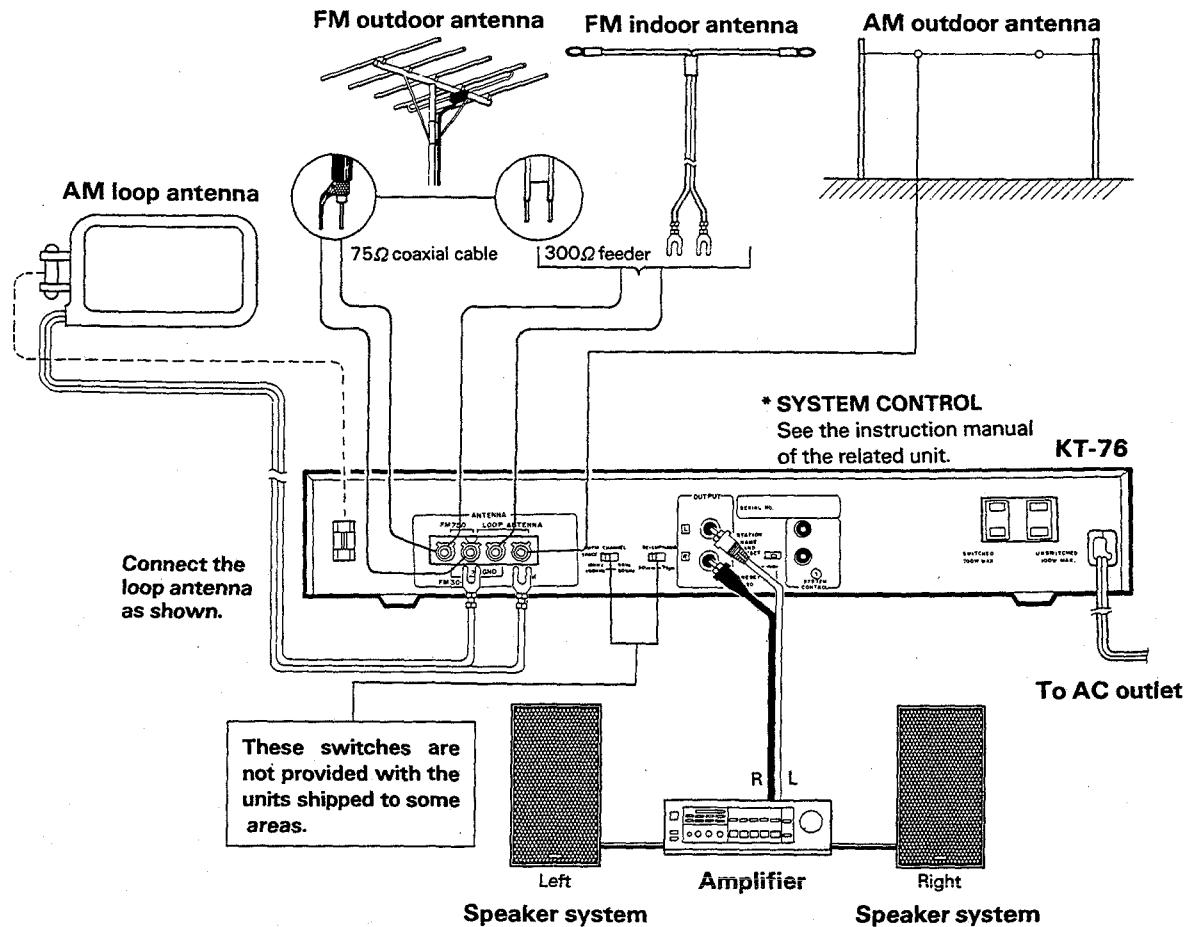
Wire colour	Plug terminal marking
Blue.....	N or Black
Brown .....	L or Red



### Notes:

- 1) If a 13-amp plug is used, this must be fitted with a 5-amp fuse.
- 2) If a 3-pin plug with earthing contact is used, no wire must be connected to the E terminal.

# System connections



## Output

Signals from the output jacks are fed to the amplifier. Connection cables should be plugged to the amplifier TUNER or AUX jacks. Shielded cables terminated at both ends with standard phono plugs are supplied with this tuner.

### AC outlet (KT-76)

The AC outlets on the rear panel can be used to supply power to other components in the system. Never connect equipment whose power consumption exceeds the maximum value shown at each outlet.

**SWITCHED:** This outlet supplies power when the unit is set to tuner mode or the built-in timer is activated. The maximum capacity is 700 W.

**UNSWITCHED** (except some models): The outlet provides power when the unit is plugged into an active AC wall outlet, regardless of the setting of the POWER switch or timer. The maximum capacity is 100 W.

### AC outlet (KT-550L)

**SWITCHED:** This outlet supplies power when the unit is set to tuner mode or the built-in timer is activated. The maximum capacity is 400W.

## Ground

For maximum safety and minimum interference connect the GND terminal to a good earth ground if practicable.

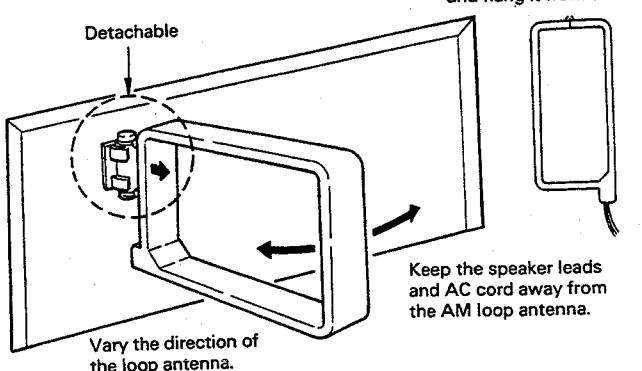
A good earth ground is a cold water pipe or a metal stake driven into moist earth. However, never use a gas pipe for this purpose.

## AM (MW/LW) antennas

### AM (MW/LW) loop antenna

Connect the AM loop antenna cords to the AM ANTENNA terminals, tune in your favorite AM station and locate the AM loop antenna for best reception. Try other stations and find the position that gives best overall reception. Peel off the covering seal from the AM loop antenna bracket and fix the bracket to the best reception position. If the length of the cord wire is too short, add a cord of an appropriate length.

## KT-76



### AM (MW/LW) outdoor antenna

In steel buildings or at a great distance from the transmitter, it may be necessary to install an outside long wire antenna. The end of this wire should be stripped of insulation and connected to the AM terminal. At this time, keep the loop antenna connected.

### FM antennas

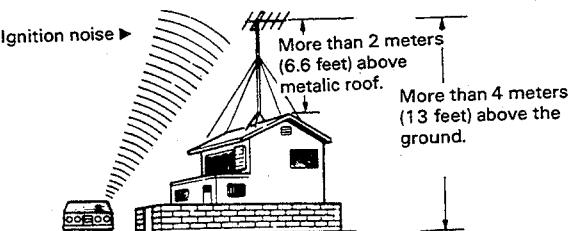
Your tuner approaches the theoretical limit in FM sensitivity. However, the performance of your system is determined to a very large extent upon the signal conditions where the antenna is placed. The reason is that FM broadcast signals travel in straight paths. Therefore they can be blocked by natural or man-made obstructions such as mountains, hills, or buildings. At large distances from the transmitter the curvature of the earth acts as a screen between transmitter and receiver.

Consider the signal conditions in planning your installation. If you live in or near an urban area the indoor antenna (supplied) may serve your needs adequately. However, if favorite stations are weak due to natural obstructions, or if you live in a building which is made of steel-reinforced concrete (which acts as a shield) it may be necessary to install a good outdoor antenna.

### FM outdoor antenna

Consult with your dealer or service man about the best method of selecting and erecting an outdoor FM antenna.

The choice of lead-in (feeder) wire is also important. The flat ribbon-shaped twin lead performs well electrically, is cheaper and is somewhat easier to handle in routing through windows and around rooms. Coaxial cable is more expensive, does a much better job of minimizing interference, is less prone to the effects of weather and close-by metal objects, and is nearly as good a signal conductor as the ribbon type wire. The latter is particularly true of foam-type coaxial cables. Coaxial cable is somewhat more difficult to install at the point where the cable enters the building. If coaxial cable is selected, make sure the antenna is designed to drive that type of cable.



- To minimize auto-ignition noise, locate the antenna as far from heavy traffic as possible.
- Keep the feeder or coaxial cable as short as possible. Do not bundle or roll up excess cable.
- The antenna should be at least two meters (6.6 feet) from reinforced concrete walls, or metal structures.

### FM outdoor antenna installation

#### Note:

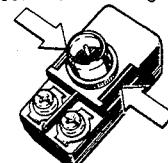
Do not connect both the  $300\Omega$  feeder and  $75\Omega$  coaxial cable to the FM antenna terminal.

### FM indoor antenna

Connect the T-shaped indoor antenna (supplied) to the  $300\Omega$  FM ANTENNA terminals as shown in the System connections diagram. Spread the two arms that form the top of the "T" horizontally and hold them against convenient wall surfaces. Try several locations for best results on your favorite stations. Tape the antenna in place where the best compromise is found between listening results and appearance.

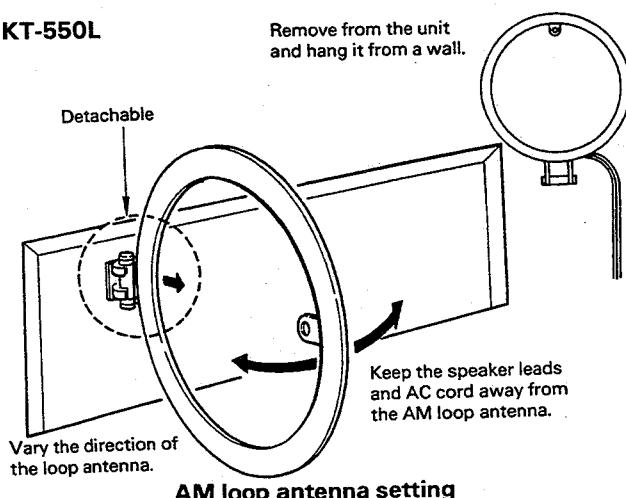
### 75Ω coaxial cable connection (KT-550L)

After stripping the end of your coaxial cable, mount the supplied  $75\Omega/300\Omega$  FM antenna adapter on the cable as shown. Then insert the plug into the  $75\Omega$  ANTENNA terminal on the rear panel as shown in System connections diagram.

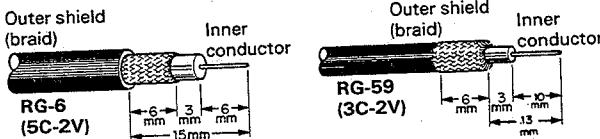


### How to open the $75\Omega/300\Omega$ antenna adapter

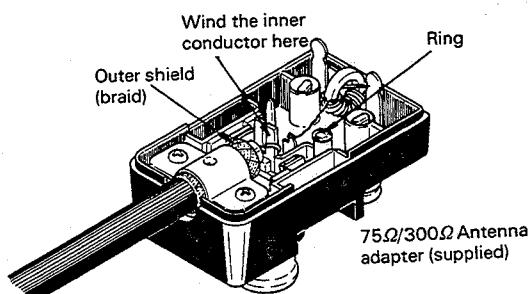
## KT-550L



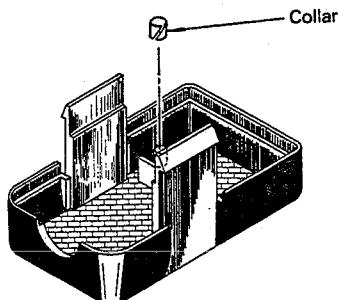
- Arrange the coaxial cable as illustrated.



- Connect the processed coaxial cable to  $75\Omega/300\Omega$  antenna adapter as shown below. In the case of RG-6, insert and wind the inner conductor around the slit. In the case of RG-59, further insert and wind the inner conductor around the slit. Detach the collar in the antenna adapter.



- Put the collar on the pole in the cover.



**75Ω/300Ω antenna adapter**

#### 300Ω ribbon type cable connection

Although the unit is designed exclusively for use with  $75\Omega$  coaxial cable, it can also accept a  $300\Omega$  indoor antenna or  $300\Omega$  ribbon-type lead-in cable by using the supplied  $75\Omega/300\Omega$  Antenna Adapter. Strip the plastic insulation from the wire ends for about 10 mm (3/8 inch). Connect the wires to the terminals on the adapter, then insert it into the  $75\Omega$  ANTENNA terminal on the rear panel (see System connections diagram).

**System connections diagram.**  
If you connect a  $300\Omega$  feeder cable, you need not detach the collar in the  $75\Omega/300\Omega$  antenna adapter.  
If the collar is detached, the sensitivity will decrease.

**Note:**

An FM outdoor antenna can be connected to the tuner with either a  $75\Omega$  coaxial cable or  $300\Omega$  ribbon feeder. For proper connection, carefully read the instruction manual for the FM outdoor antenna.

#### FM DE-EMPHASIS switch (rear panel)

(This switch is provided to the units for some areas.)

This switch has been set to the correct position for a given market area. However, check to see that this switch is set correctly before operating your tuner. An incorrect setting will adversely affect high frequency performance. (The FM DE-EMPHASIS switch is not equipped with units shipped to Oceania.)

Europe and Oceania.....	50 $\mu$ s
Other countries .....	75 $\mu$ s

#### FM/AM CHANNEL SPACE switch (rear panel)

(This switch is provided to the units for some areas.)

The CHANNEL SPACE switch on the rear panel switch on the rear panel is set to the correct setting that prevails in the area to which the unit is shipped. However, if the channel space setting is not matched to the area where the tuner is to be used; for instance, when you moved from area 1 to area 2 or vice versa, desired broadcast cannot be received correctly. In this case, change the CHANNEL SPACE setting in accordance with the area corresponding to the table shown below.

Area	Channel Space Freq.
1 U.S.A., Canada Hawaii, and Guam	FM: 100 kHz AM: 10 kHz
2 European countries Far East countries	FM: 50 kHz AM: 9 kHz

**Channel Space Table**

**Note:**

When changing the setting of the AM/FM CHANNEL SPACE switch, disconnect the POWER cord.

#### LW CHANNEL FREQUENCY switch (KT-550L)

The LW frequency step changes in area. If the unit fails to stop at desired LW station in auto tuning mode, set this switch to opposite position.

## Before operation

#### Notes on installation

Do not place the unit in a place which is exposed to direct sunlight, near a heating appliance, etc.  
Do not place a vase containing water, makeup, etc. on the unit. Do not use in a humid place.  
Choose a location that is relatively free from vibration or excessive dust.  
Keep the unit away from a source of magnetic fields such as TV sets, motorized toys, etc.

#### Safety precautions

Never remove the case. If the internal parts are touched, accidentally, a serious electric shock might occur.  
Touching the power plug when your hands are wet may result in a serious electric shock.  
Never pull, bend or extend the power cord. This could damage the power cord, resulting in a broken cord or shortcircuit.

#### In case of abnormal smell

If an abnormal smell or smoke is detected, immediately turn the power OFF and pull out the power cord. Contact your dealer or nearest Kenwood Service Station.

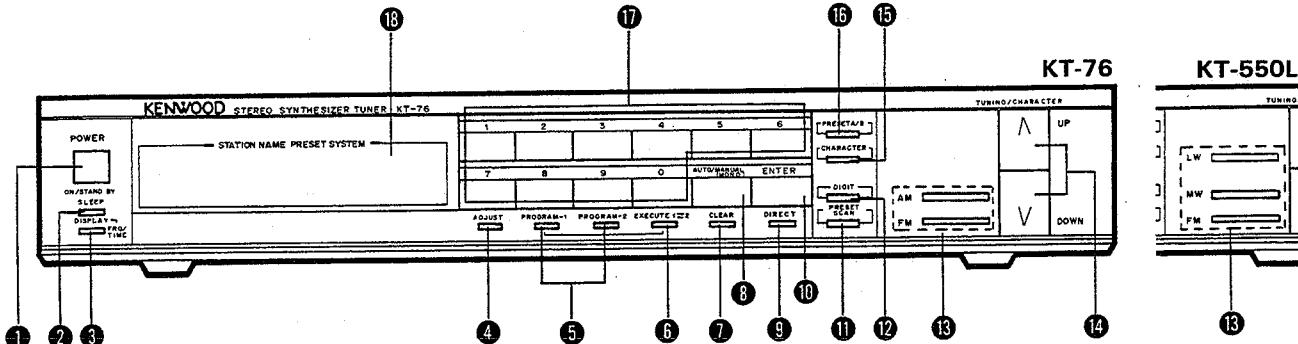
#### Cleaning

Do not use volatile solvents such as alcohol, paint thinner, gasoline, benzine, etc. to clean the cabinet.  
Use a silicone cloth or a clean dry cloth.

#### Noise interference

If interference occurs in AM mode due to the connected equipment which uses a microprocessor, detach the AM loop antenna and move it away from the unit using the supplied holder.

# Controls and indicators



## ① POWER switch

Turns the power to the unit on and off.

## ② SLEEP TIMER button

Press this button to set sleep timer (up to 60 minutes with 10 minutes intervals).

## ③ DISPLAY FRQ/TIME button

Use this button to switch between the frequency and timer display modes.

## ④ ADJUST button

Press this button to adjust the clock time.

## ⑤ PROGRAM 1, 2 button

Press this button to set programming timer.

## ⑥ EXECUTE 1 — 2 button

Press this button to select the 1 or 2 program of the timer and both 1 and 2 programs can also be selected.

Also it returns to the first column of the four characters.

## ⑦ CLEAR button

Press this button to cancel the input mode of the time or program timer. When this button is pressed, the input mode returns to the previous one. In the station mode, it returns to the first column of the four characters.

## ⑧ TUNING MODE button

Press this button to select the tuning mode between AUTO or MANUAL. In MANUAL mode, an FM stereo broadcast is received in monaural.

## ⑨ DIRECT tuning button

When this button is pressed, the desired broadcast can be received by inputting the frequency of the station.

## ⑩ ENTER button

Press this button to activate the station memory and clock after entering the present time with the PRESET button.

## ⑪ PRESET SCAN button

When this button is pressed, each of the preset stations will be received for several seconds sequentially. When one preset station is being received, scanning starts from the next preset station. If not, scanning will start from the station preset in the A-1 channel.

## ⑫ DIGIT button

When inputting the station name, press this button after selecting the character to memorize the character, and the unit enters the standby mode to inputting the next column.

## ⑬ Band selector buttons

Press to select receiving band.

## ⑭ TUNING button

**AUTO-tuning:** When the UP or DOWN side is pressed, the frequency automatically increases or decreases until the next station of sufficient signal strength is reached.

**MANUAL (MONO) tuning:** Each time the UP or DOWN side is pressed, the displayed frequency increases or decreases. When either side of the button is held down, the displayed frequency will continue to increase or decrease until the button is released.

## ⑮ CHARACTER button

Press this button to set or release the station name input mode. This button is valid when the unit is in the "station name indication present" mode.

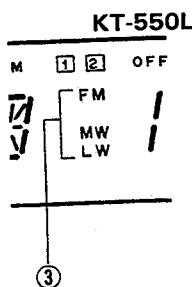
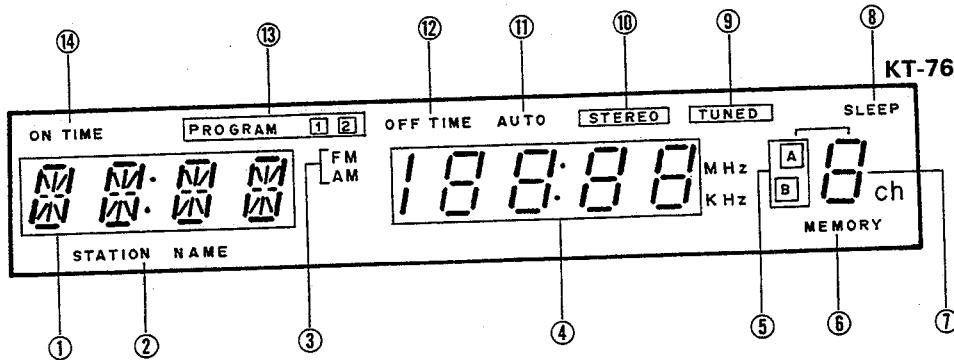
## ⑯ PRESET A/B switch

Press this switch to select the A or B preset station group.

## ⑰ PRESET buttons (1 – 0)

Used to set time and program timer. Also, these buttons are used to preset broadcast stations.

## ⑯ DIGITAL FREQUENCY COUNTER



### ① STATION NAME/Time display

Displays the station name or on time.

### ② STATION NAME indicator

### ③ Band indicators

Indicate the reception band.

### ④ Frequency/time display

Displays the receiving frequency or current time.

### ⑤ Preset function indicator A/B

Indicate the preset function A or B.

### ⑥ MEMORY indicator

Lights for about 5 seconds when the ENTER button is pressed in tuner mode.

### ⑦ Preset channel indicators

Indicate the pressed PRESET button.

### ⑧ SLEEP timer indicator

Lights when the sleep timer is set.

### ⑨ TUNED indicator

Lights when the station is tuned in correctly.

### ⑩ STEREO indicator

Lights when an FM stereo broadcast with a sufficient signal strength is received.

### ⑪ AUTO indicator

Lights when the tuning mode is set to AUTO with the TUNING MODE button.

### ⑫ OFF time display

Displays the off time of the program timer.

### ⑬ PROGRAM 1/2 indicators

Blinks when setting the program timer.

### ⑭ ON time display

Displays the on time of the program timer.

# Operating instructions

## Setting the current time

1. Confirm that the DIGITAL FREQUENCY COUNTER is in the time display mode.  
When the DIGITAL FREQUENCY COUNTER is in the frequency display mode, press the POWER switch.
2. Press the ADJUST button.  
The hour display of the left starts flashing.



When the station name is not displayed.

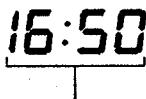
3. Input the current time using the PRESET buttons (1 to 0).  
The clock employs 24-hour system. Press the PRESET buttons as follows.

AM 9:05      Input in the order of  
                  0-9-0-5

PM 4:50      Input in the order of  
                  1-6-5-0



- When 4 digits are input, the entire time display flashes.  
To change the input digit, press the CLEAR button and proceed the above steps again.
4. Press the ENTER button  
The time display illuminates.



Illuminates.

When the ENTER button is pressed, the clock starts.

Press the ENTER button according to the time signal of the radio or telephone service.

### Note:

When the time display flashes, this indicates the power failure occurred. At that time, reset the current time.

## Listening to broadcasts

### Auto tuning

1. Press the POWER switch.
2. Set the input mode of the amplifier to tuner.
3. Select the reception band with the band selector buttons.
4. Press the TUNING MODE button so that the AUTO indicator lights.
5. Press UP or DOWN side of the TUNING button.  
The unit starts scanning in the specified direction and stops at a station with a sufficient signal strength.
6. Adjust the volume control of the amplifier.

### Manual tuning

1. Press the POWER switch.
2. Set the input mode of the amplifier to tuner.
3. Select the reception band with the band selector buttons.
4. Press the TUNING MODE button so that the AUTO indicator disappears. In the FM band, the MONO indicator lights.
5. Press UP or DOWN side of the TUNING button until the desired station is received.  
When the TUNING button is kept pressed, the displayed frequency changes rapidly.
6. Adjust the volume control of the amplifier.

### Direct station tuning

1. Press the DISPLAY button to set the display window to the frequency mode.  
Select the desired band with the band select button (AM/FM).
2. While the frequency indicator is displayed, press the DIRECT button.

4. Input the number of the frequency with the PRESET buttons.
5. When the input frequency is within the range of the band, the station of the input frequency is received immediately after the final column is input.  
If the input frequency is out of the range of the band, the frequency indicator flashes for 5 seconds and error indication is displayed, then the display mode before pressing the DIRECT button resumes.
6. During inputting the frequency, when the incorrect PRESET buttons is pressed by mistake and is noticed, press the CLEAR button to return to the standby mode for the first column input.

## Presetting stations

With the station name displayed, a total of 12 stations can be preset, and with the station name not displayed, a total of 20 stations can be preset for AM or FM broadcast. (Select the number of preset stations with the STATION NAME AND PRESET select switch located on the rear panel of the tuner.)

1. Press the DISPLAY button to set the display to the frequency display mode.
2. Press the AM or FM band select key.
3. Receive the desired station to be memorized with the TUNING button or DIRECT tuning function.  
At this time, input the station name if required, referring to "Station Name Indication" on page 9. (This operation is possible after memorizing the frequency.)
4. Press the ENTER button.  
"MEMORY" displays in the display window.
5. Select the A or B preset group with the PRESET A/B switch.  
When this is not done, the preset group which is currently indicated is selected.
6. Within 5 seconds, press any of 1 to 6 numeric keys (when the station name is displayed) or 1 to 0 keys (when the station name is not displayed).

The MEMORY indicator in the display window goes off and the preset indicator will light.

In the same way, preset the other stations. When presetting the station into the "10" preset indicator, press the "0" preset button.

### STATION NAME AND PRESET switch located on the rear panel of the tuner

- : When the station name is not displayed (10 stations for each A and B)  
■: When the station name is displayed (6 stations for each A and B)



### Note:

1. When the station is memorized into the preset number in which another station has been preset, the previously-preset station will be cleared and the newly-preset station will be memorized.  
Be sure to press the preset button (1 to 0) after releasing the ENTER key.  
If the preset button (1 to 0) is pressed while the ENTER key is pressed, the same frequency may also be memorized into the other preset button.
2. In the station name display mode (when the STATION NAME AND PRESET switch on the rear panel is set to "12" position), the 7 to 0 preset buttons are invalid.
3. Operate the preset station number switch on the rear panel after plugging out the power cord from the AC outlet.
4. If you perform the above operation after you have once preset the tuning station, the preset contents will be erased.

## Preset memory

For presetting broadcast stations, a total of 12 stations can be preset when the station name is displayed, or a total of 20 stations can be preset when the station name is not displayed for all bands randomly.

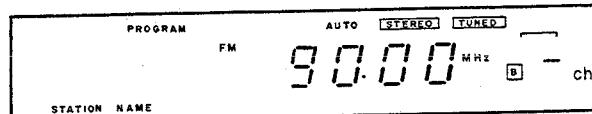
Up to 6 stations or 10 stations can be preset for each A and B and B group

### How to preset

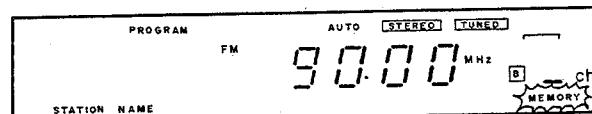
1. Receive the desired station to be memorized with the UP/DOWN button or using the direct tuning function.
2. Input the station name when the station name display is required. (This operation is possible after memorizing the frequency.)
3. Press the ENTER button. (This is valid only when the frequency is displayed.)
4. Select the A or B preset group with the PRESET A/B switch.
- When this is not done, the preset group which is currently indicated is selected.
5. Press any of the 1 to 6 (when the station name is displayed) or 1 to 0 (when the station name is not displayed) buttons.

Example: To memorized 90.0 MHz into A-3 channel  
(station name display mode)

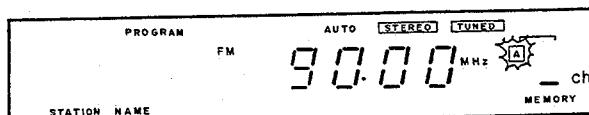
1. Receive the desired station with the UP/DOWN button or DIRECT button.



2. Press the ENTER button on "MEMORY" lights.



3. Press the Preset A/B switch once to indicate "A".



4. Press "3" button on. "MEMORY" goes off, and "3" lights.



### Recalling the Preset Memory

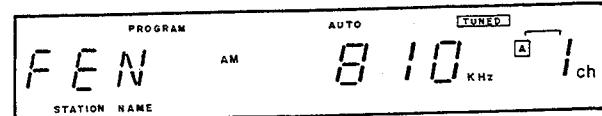
During the tuner functions, select "A" or "B" with the A/B select switch and press any of the PRESET buttons. The memorized contents corresponding to the PRESET number pressed will be displayed.

When the A/B switch is not pressed, the memorized contents corresponding to the PRESET button of the currently selected group will be recalled.

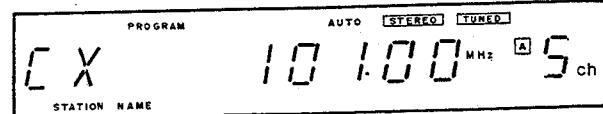
However, when the station name display mode is selected, four "7" to "0" Preset buttons do not function.

Example: During receiving the "FEN AM 810 kHz" in A-1 preset channel, to recall "CX FM 101 MHz" of A-5 preset

1. During preset A-1: AM 810 MHz reception



2. Press "3" button on.  
"FM 101 MHz" memorized in A-5 channel is received



## Preset scan

During the tuner is functioning, when the PRESET SCAN button is pressed, each preset frequency will be received for 5 seconds sequentially.

If no station is preset in the preset channel, the next preset channel will be received after one second.

When any of the preset channel is currently received, the scanning starts from the next preset channel. If not, scanning will start from the A-1 preset channel.

→ A-1 → A-2 ----- A-9 → A-0 → B-1 → B-2 ----- B-9 → B-0 →

To release this function, press the PRESET SCAN button again.

## Preset station tuning

1. Press the PRESET A/B switch to select A or B.
2. Press any of 1 to 0 PRESET buttons.  
The broadcast station which is preset into the PRESET button pressed will be received.

### Note:

1. Since the plug-in backup system is provided with this tuner, the station frequencies preset in each PRESET button will not be cleared even when the POWER switch is set to the STAND BY position.  
However, when the AC power plug is disconnected from the AC outlet, the preset frequencies will be cleared approx. 3 days later.
2. When the station name display mode is selected, the "7" to "0" PRESET buttons are invalid.

## Last channel memory

When the POWER switch is turned On, or when the broadcast band (AM or FM) is changed to another, the last received channel of each band will be received. (Last channel memory function)

### Station Name Indication (Station Name Preset)

Set the select switch located on the rear panel of the tuner to the STATION NAME PRESET 12 position.

#### Character input procedure

1. Tune to the desired station with the TUNING button or the DIRECT tuning method.

When the desired station has been preset, call the station with the corresponding PRESET A/B switch and PRESET buttons.

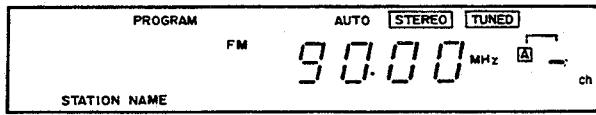
2. Press the CHARACTER button to set the character input mode. The first column of the character display section begins flashing.
  3. Turn the TUNING knob to select the character.
  4. When the desired character is displayed, press the DIGIT button.
- Flashing will shift to the next column.
5. Repeat procedure 3 and 4 for four times to complete inputting. The character input mode will be released.
  - When the incorrect character input by mistake and is noticed, press the CLEAR button to return to the standby mode for the first column input.
  - Even in the middle of inputting, pressing the CHARACTER key again will release the character input mode. At this time, the data which has been input is valid.
  - When the preset channel to be named is being received, the character data will be automatically stored in the currently-displayed preset channel after inputting operation is completed.

**Note:**

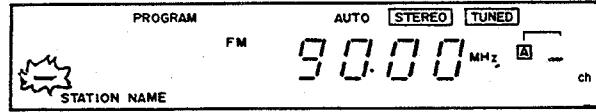
1. Disconnect the power plug of the tuner from the AC outlet before changing the setting of the select switch for the number of preset stations.
2. When the above operation is performed after the broadcast station has been preset, the preset contents will be cleared.

Example 1: To receive the 90.0 MHz FM broadcast and input the characters "C, B, E" when the station other than the preset channel memories is received. Shows the indicator flashing.

1. Tune to 90.0 MHz FM broadcast.

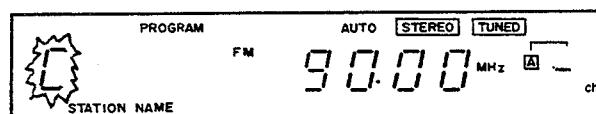


2. Press the CHARACTER button.

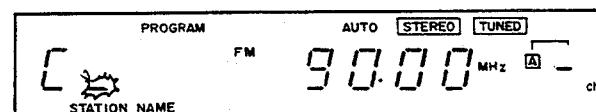


3. Press the TUNING UP button three time to select "C".

→ A → B → C

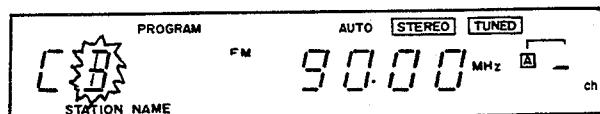


4. Press the DIGIT button.

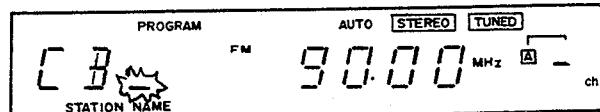


5. TUNING UP button twice times to select "B".

→ A → B

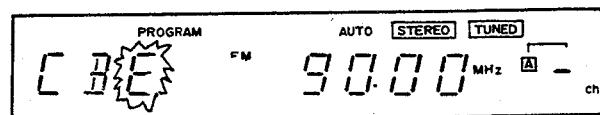


6. Press the DIGIT button.

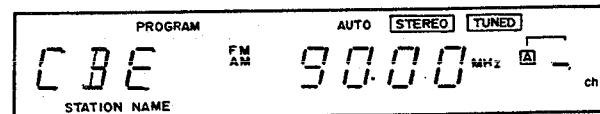


7. TUNING UP button five times to select "E".

→ B → C → D → E



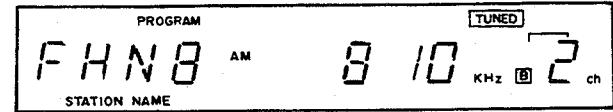
8. As the fourth column should be left blank, press the DIGIT button twice or press the CHARACTER button.



- \* After inputting is completed, memorize it into the desired preset channel according to the "Preset Station Tuning" section.

Example 2: To change the station name from "FHN8" for 810 kHz AM broadcast memorized in B-2 preset channel to "FEN".

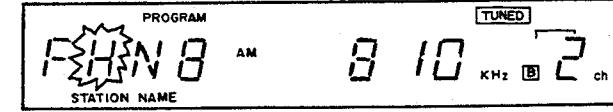
1. Recall the B-2 preset channel with the PRESET A/B switch and the PRESET button according to "Recalling the Preset Memory".



2. Press the CHARACTER button.

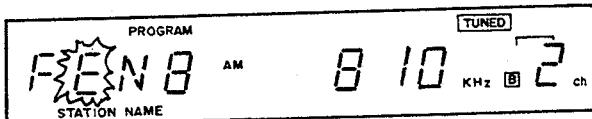


3. Press the DIGIT button to shift the flashing character to the next column since the first character "F" should be left as it is.

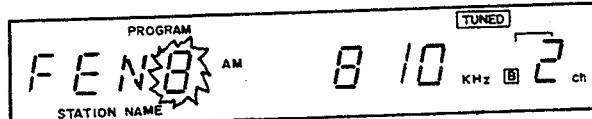


4. Press the TUNING (DOWN) button to select "E".

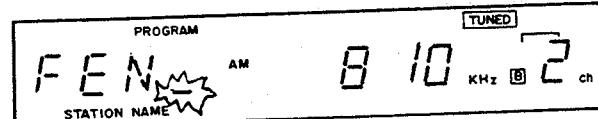
H → G → F → E



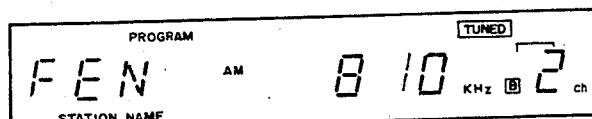
5. Press the DIGIT button twice.



6. Press the TUNING button to select a blank.



7. Press the DIGIT button or press the CHARACTER button.



## Operating timer

### Setting the program timer

- Timer Setup Procedure (The same procedure can be used for both Program 1 and Program 2.)

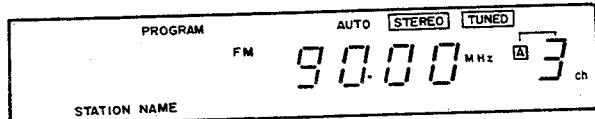
The timer can be set only when the POWER switch has been turned ON. When power is OFF, it is possible only to check the program contents.

During setup, the station which has been received is not changed, and the AUTO, BAND, MAIN and SUB indications remain the same.

Example 1. To set a Preset channel (B-2) in Timer 1 with On Time 8 : 45 and Off Time 9 : 35

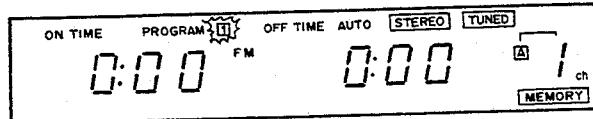
1. Current Condition

Reception of FM 90.0 MHz stored in A-3.



2. Displaying PROGRAM

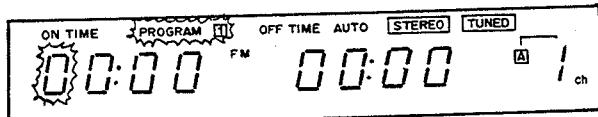
Press the Program 1 (PGM-1) key.



When the PGM-1 key is pressed, the "1" indicator flashes and the display shows the content of Program Timer 1. The above display continues for approx. 5 seconds. During this period, press the ENTER key during to enter the Timer Setup mode.

When the PGM-1 key is pressed during this display period, the previous returns to the previous status.

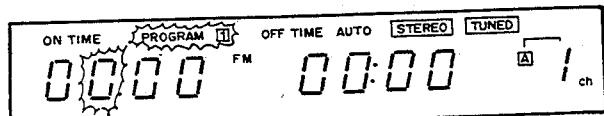
3. Starting Setup  
Press the ENTER key.



When the ENTER key is pressed, the "PROGRAM 1" indicator flashes to indicate that the Timer Setup mode. At the same time, the first digit of the ON TIME display starts to flash, indicating the entry standby for this digit. If you find it unnecessary to change the current ON TIME, just press the ENTER key; you can then start the entry of the OFF TIME.

4. Entry of ON TIME

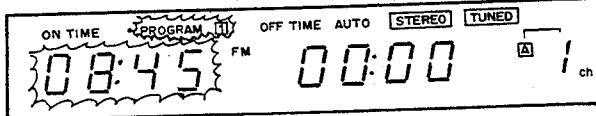
Press numeric key "0".



When "0" is pressed, the first digit of the ON TIME display goes "0" which is lit continuously, and the second digit starts flashing. When you made a mistake in entry, press the CLEAR key; the display returns to the stage of entry standby for the first digit.

5. Entry of ON TIME Using 10 Numeric Keys

Enter "8", "4" then "5". Press these numeric keys within 15 seconds.

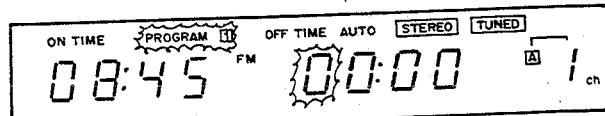


When four ON TIME digits have been entered, all the ON TIME digits flashes to indicate the end of ON TIME entry. If the setup is correct, press the ENTER key.

If the desired ON TIME is obtained by entering until the third digit, press the ENTER key after the third digit. To modify the ON TIME entered, press the CLEAR key; the display returns to the stage or entry standby for the first digit.

6. Setting of ON TIME

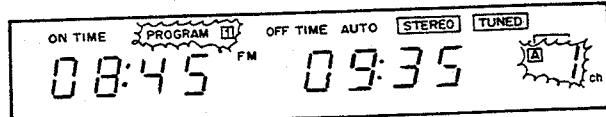
Press the ENTRY key.



When the ON TIME entry is finished, the ON TIME display lights continuously and the first digit of the OFF TIME display starts to flash, indicating the entry standby for this digit. If you found entry mistake at this time, press the CLEAR key; the display returns to the stage of entry standby for the first digit.

7. Entry and Setting of ON TIME

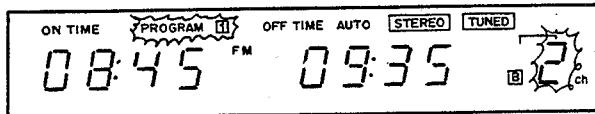
Press numeric keys "0", "9", "3" then "5", and press the ENTER key.



When the ENTER key is pressed, the OFF TIME display lights continuously, indicating the end of OFF TIME entry. In its place, the preset channel display starts flashing to indicate the standby for preset channel entry. If you found entry mistake at this time, press the CLEAR key; the first press returns the display to the stage of entry standby for the OFF TIME first digit, and the second press returns it to the stage of entry standby for the ON TIME first digit again.

#### 8. Entry of Preset Channel

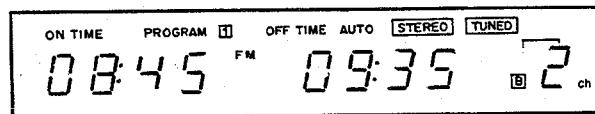
Select the preset channel group by pressing the PRESET A/B key, then press numeric key "2".



When the PRESET A/B key is pressed, the other indicator that the currently-flashing indicator lights (A → B, or B → A). When the numeric key is pressed, the figure of the preset channel changes to that pressed. If you found entry mistake at this time, press the CLEAR key; the display returns to the status before the PRESET A/B key was pressed.

#### 9. End of Timer Setup

Press the ENTER key.



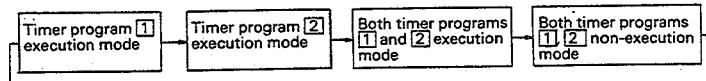
When the preset channel number has been entered, press the ENTER key.

The preset channel and PROGRAM indicators light continuously, indicating the end of timer setup. The above display continues for approx. 5 seconds, and the display returns to the initial status.

#### Notes:

- If the PGM-1 key is pressed during timer setup operation, the timer setup mode is canceled and the display returns to the initial status.
- When the station name display is applied, it is possible to select preset channels 1 to 6 for both A and B.

### Using the program timer



1. Press the POWER switch so that the unit is in the standby mode.
2. Press the EXECUTE 1 = 2 button to select the program timer to be used.  
To use program timer 1 or 2, press the EXECUTE 1 = 2 button so that the PROGRAM 1 or 2 indicator light.
3. When the preset on time is reached, the program timer turns on and the selected preset station is received.
4. When the preset off time is reached, the program timer turns off.

### To function timer program 1, 2

Press the EXECUTE 1 = 2 button display the timer program 1 or 2 indicator.

#### Note:

With both Timer 1 and 2 programmed, when the Timer 1 is executed, the Timer 2 will not function. Also when the Timer 2 is executed, the Timer 1 will not function.

### To cancel the program timer

Press the EXECUTE 1 = 2 button so that the PROGRAM 1 and/or 2 indicator goes off.

### To check the contents of timer program

1. Press the [PGM-1] or [PGM-2] key in which the program to be checked is input. The contents of the selected program is displayed for 5 seconds.
2. Then the display before the key is pressed resumes.  
Even in the STAND BY mode (when only the time is displayed), pressing [PGM-1] or [PGM-2] key will display the program contents for 5 seconds, then the time display will resume.

Setting the timer is possible only when the POWER switch is turned ON. When the POWER is OFF, only the program contents can be checked.

### Notes on using program timer

- The program timer can be used only when the unit is in the standby mode.
- The unit should be set to standby mode before the preset program timer on time.
- If the EXECUTE 1 = 2 button or POWER switch is operated between preset timer on time or off time, the program timer may not function correctly.
- Two settings of the program timer 1 and 2 should be at different times.

#### Notes:

1. The timer program functions only when the Timer 1 or 2 indicator lights.
2. When the PROGRAM key is pressed or the POWER switch is pressed ON/OFF during the timer is activated, the program timer will not function correctly.
3. Be sure not to overlap the times when setting the programs 1 and 2. (Refer to the example in the figure on the right.)
- When both 1 and 2 programs are input, the program 2 has a priority.
- When the ON-time for the program 1 reaches during the program 2 is activated, the program 1 does not function.
- When the ON-time for the program 2 reaches during the program 1 is activated, the program 2 begins functioning.
4. When functioning both programs 1 and 2 sequentially, be sure to leave 1 minute between the OFF-time of the first program and the ON-time of the second program.

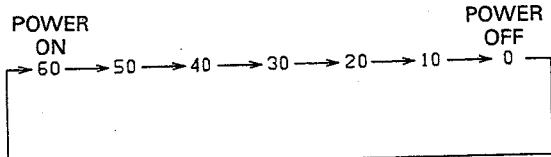
Example: When receiving 90.00 MHz FM broadcast for one hour from 8 o'clock and 954 kHz AM broadcast for one hour from 9 o'clock, set the ON-time for the program 1 to 8:00 and the OFF-time to 8:59, and set the ON-time for the program 2 to 9:00 and the OFF-time to 9:59.

5. When the timer function is activated. The same operation will be performed on the same times every day. When the timer operation is not required, release the timer function according to "To Deactivate the Timer Function".
6. On listening to the tuner with the timer function activated (when the Timer 1 or 2 indicator lights), when the set time comes, the timer operation will function.  
At this time, the receiving station will be changed to the station which has been programmed for the timer. When recording the broadcast from the tuner, be sure to confirm the programmed contents of the timer.
7. The programmed contents of the timer cannot be cancelled. When the timer is not used, be sure to release the timer function according to "To Deactivate the Timer Function".

### Using the sleep timer

The sleep timer can be used to turn the power off after up to 60 minutes. The power off time can be set with an interval of 10 minutes.

1. Press the SLEEP button.  
The SLEEP indicator lights and 60 is displayed.
2. To turn the power off within 60 minutes, press the SLEEP button.  
The displayed number changes as follows.



#### Notes:

- The sleep timer has priority over the program timer.
- When the remaining time or the SLEEP TIMER is displayed, pressing any of the PRESET buttons, TUNING button, BAND select button, etc. will display the frequency, then 5 seconds later, the remaining time display resumes.
- When the remaining time is within 10 minutes, pressing the SLEEP button will turn the power OFF.
- To release the SLEEP TIMER, press the POWER switch to turn the power OFF.
- When the time is not set, the SLEEP TIMER is not displayed.

## In case of difficulty

If your tuner should not perform as expected, consult the table below to see if the problem can be corrected before seeking help from your dealer or service representative.

Occurs during AM (MW/LW) reception only	Possible cause	Remedy
High-frequency whistle especially at night.	Interference from TV set.  Beats from adjacent AM (MW/LW) station.	Turn off TV set, if problem disappears try relocating TV set.  Impossible to eliminate, but try HIGH filter of your amplifier.
Intermittent buzz or crackling sound.	Lightning.  Fluorescent lamps starting.  Appliance or furnace starting.	No remedy.  Try reversing AC plug.  Try reversing AC plug.
Occurs during FM reception only	Possible cause	Remedy
Hiss that gets worse in stereo reception.	Very weak antenna input signal.	Consider an outdoor antenna installation. In areas remote from the transmitter a 5 to 8 element antenna designed exclusively for FM is suggested.
Rhythmic static or popping noises.	Automobile ignition noise, especially evident when receiving weak signals.	Review antenna installation. Site the antenna as far from the street as possible and use coaxial cable.
STEREO indicator fails to light during stereo broadcast.	Another possible effect of a very weak signal.	Antenna system needs attention (see above).

Possible trouble with the Synthesizer tuner	Possible cause	Remedy
Receiving is impossible even when the PRESET button is pressed.	Frequency for the broadcast station is not memorized.	Check the station frequency and memorize it correctly.
The broadcast station frequency which has been memorized in the PRESET button is cleared.	Backup memory does not function due to poor or incorrect connection of the power cord.	Be sure to connect the power cord to the wall outlet, etc. from which the AC power is always supplied.

# Specifications

## KT-76

### FM Tuner Section

Tuning frequency range.....	87.5 MHz – 108 MHz
Antenna impedance .....	300 ohms balanced 75 ohms unbalanced

### Sensitivity

Usable sensitivity (IHF): MONO .....	0.95 $\mu$ V (10.8 dBf)
50 dB quieting sensitivity (IHF)	
Mono:.....	3 $\mu$ V (14.7 dBf)

Stereo:.....	49 $\mu$ V (39.0 dBf)
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### Total harmonic distortion

Mono: (75 kHz Dev.) 100 Hz.....	0.4 %
1,000 Hz.....	0.3 %
50 Hz – 10,000 Hz.....	0.5 %
Stereo: (75 kHz Dev.) 100 Hz .....	0.5 %
1,000 Hz.....	0.3 %
50 Hz – 10,000 Hz.....	0.7 %

### Signal-to-Noise ratio

Mono: (75 kHz Dev.) 65 dBf input... 76 dB	
85 dBf input... 78 dB	
Stereo: (75 kHz Dev.) 65 dBf input.. 73 dB	
85 dBf input.. 75 dB	

### Capture ratio.....

### Alternate channel selectivity

IHF: $\pm$ 400 kHz.....	50 dB
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### Stereo separation

1,000 Hz.....	40 dB
50 Hz – 10,000 Hz.....	35 dB

### Frequency response

30 Hz – 15,000 Hz .....	+0.5 dB, -2 dB
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### Image rejection ratio (98 MHz).....

### IF rejection ratio (98 MHz).....

### Spurious rejection ratio (98 MHz).....

### AM suppression ratio.....

### Sub-carrier suppression ratio.....

### Output level/impedance

FM: 1,000 Hz, 100 % Dev. (fixed)....	0.6 V/3.3 kohms
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## AM Tuner Section

Tuning frequency range.....	531 kHz – 1,602 kHz (9 kHz step)
	530 kHz – 1,610 kHz (10 kHz step)

### Usable sensitivity.....

### Signal-to-Noise ratio

(30 % Mod; 1 mV input.....	50 dB
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### Total harmonic distortion.....

### Image rejection ratio.....

### IF rejection ratio.....

### Selectivity (IHF).....

### Output level/impedance

(400 Hz, 30 % mod).....	0.18V/3.3 kohms
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## General

Power requirements.....	120 V, 60 Hz (U.S.A. and Canada models)
	110 – 120 V/220 – 240 V, 50/60 Hz (Switchable)

### Power consumption.....

### Dimensions.....

### Weight (Net).....

W: 420 mm (16-9/16")	
H: 74 mm (2-15/16")	
D: 267 mm (10-1/2")	

2.8 kg (6.2 lb)	
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## KT-550L

### FM Tuner Section

Tuning frequency range.....	87.5 MHz – 108 MHz
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### Antenna impedance .....

75 ohms unbalanced	
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### Sensitivity (DIN)

Mono: S/N 26 dB, 40 kHz Dev.....	1.0 $\mu$ V
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Stereo: S/N 46 dB, 46 kHz Dev.....	29 $\mu$ V
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### Limiting level

- 3 dB point, 40 kHz Dev.....	0.5 $\mu$ V
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### Total harmonic distortion (DIN)

Mono: 1 kHz, 40 kHz Dev.....	0.15 %
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Stereo: 1 kHz, 46 kHz Dev.....	0.2 %
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### Signal-to-Noise ratio unweighted (DIN)

Mono: 40 kHz Dev.; 1 mV input.....	68 dB
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Stereo: 46 kHz Dev.; 1 mV input.....	64 dB
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### Signal-to-Noise ratio weighted (DIN)

Mono: 40 kHz Dev.; 1 mV input.....	68 dB
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Stereo: 46 kHz Dev.; 1 mV input.....	63 dB
--------------------------------------	-------

### Capture Ratio .....

### Alternate Channel Selectivity .....

(DIN: $\pm$ 300 kHz)	64 dB
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### FM stereo separation: 1 mV input (DIN)

250 Hz.....	48 dB
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1,000 Hz.....	50 dB
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6,300 Hz.....	36 dB
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12,500 Hz.....	28 dB
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### Frequency response

30 – 15 kHz.....	+0.5 dB, -2.5 dB
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Image rejection ratio (98 MHz).....	75 dB
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IF rejection ratio (98 MHz).....	95 dB
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Spurious rejection ratio (98 MHz).....	100 dB
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AM suppression ratio.....	70 dB
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### Sub-carrier suppression ratio

do. 19 kHz, 46 kHz Dev.....	70 dB
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do. 38 kHz, 46 kHz Dev.....	75 dB
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### Output level/impedance

at 1 kHz, 100 % Dev. (fixed).....	0.6V/3.3 kohms
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## MW Tuner Section

Tuning frequency range.....	531 kHz – 1,602 kHz (9 kHz step)
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### Usable Sensitivity.....

14 $\mu$ V (400 $\mu$ V/m)	
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### Signal-to-Noise ratio

(30 % mod, 1 mV input).....	50 dB
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### Total harmonic distortion.....

0.5 %	
-------	--

### Image rejection ratio .....

35 dB	
-------	--

IF rejection ratio .....	60 dB
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Selectivity (IHF) .....	30 dB
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### Output level/impedance

(400 Hz, 30 % Mod.).....	0.18V/3.3 kohms
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## LW Tuner Section

Tuning frequency range.....	153 kHz – 281 kHz (1 kHz step)
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### Usable Sensitivity.....

17 $\mu$ V (800 $\mu$ V/m)	
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### Signal-to-Noise ratio

(30 % mod, 1 mV input).....	50 dB
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### Total harmonic distortion.....

0.5 %	
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### Image rejection ratio .....

35 dB	
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IF rejection ratio .....	60 dB
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